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#### DECEMBER 2017 PARTNERSHIP FOR A DRUG-FREE NEW JERSEY (PDFNJ) STUDY

#### **Project Title**

Public Knowledge, Attitudes, and Actions Regarding the Opioid Addiction Epidemic in New Jersey.

#### **Background and Research Objectives**

Drug overdose is currently the leading cause of accidental death in New Jersey, and the rate of heroin overdose in the state is three times the national average. Many of those affected begin their journey to opiate addiction through legally prescribed pain medications and then move on to heroin when they are unable to afford or obtain these medications. National and local efforts to curb this major public health problem recognize that public education campaigns are needed to alert citizens in all walks of life to the problem and arm them with information that will allow them to recognize when they and their loved ones are at risk and how they should act. For over a decade, the PDFNJ has developed and implemented a comprehensive and carefully coordinated public awareness campaign that takes advantage of multiple media and community channels to disseminate messages that are tailored to various target audiences (parents, friends, teachers, school nurses, employers, and physicians among many others) to educate New Jerseyans about the risks of opioid addiction and what they can do, personally and collectively, to protect their families and communities from this devastating epidemic.

The primary goal of this study is to assess remaining gaps in New Jerseyans' knowledge, beliefs, and attitudes regarding opioid addiction and to identify novel messaging strategies to address these gaps.

#### **Survey Methodology**

Survey data were collected from a sample of New Jersey adults in December 2017. The survey was administered by Rutgers University's Eagleton Center for Public Interest Polling (ECPIP). The survey questionnaire (see Appendix A) was developed by the Principal Investigator (Dr. Itzhak Yanovitzky, School of Communication & Information, Rutgers University), with design assistance from Dr. Ashley Koning of ECPIP. Approval to field the study at Rutgers, The State University of New Jersey, was obtained from the Rutgers Institutional Review Board by Dr. Yanovitzky (Protocol # 17-648).

Responses were collected from an online sample of adults provided by Survey Sampling International (SSI). SSI's online sample is made up of 34 proprietary panels from across the globe. Participants are invited to participate in a variety of ways and are thoroughly evaluated before being accepted into any individual study's sample. SSI also ensures that its various panels are well blended and quality controlled in order to form a consistent overall sample.

For a New Jersey sample, specifically, SSI's total online sample contained 919 possible participants. The breakdown between the quota per demographic needed by this study and the corresponding number of participants within that same demographic in SSI's online total sample is as follows:

Description – NJ Residents	Quota	<b>Panel Distribution</b>
Gender male	384	442
Gender female	416	479
A ma 10 24	91	105
Age 18, 24	132	152
Age 25, 34	136	157
Age 35, 44	152	175
Age 45, 54	136	157
Age 55, 64	152	157
Age 65	132	175
Education Level (US) Completed some		
high school, High school graduate	308	355
Education Level (US) Completed some		
college	206	237
Education Level (US) College degree,		
Completed some postgraduate, Master's degree, Doctorate, law or professional		
degree	284	327
Dago /Ethnicity, US White	470	F20
Race/Ethnicity US White	470 97	539
Race/Ethnicity US African American		112
Race/Ethnicity US Hispanic	144	166
Race/Ethnicity US Asian, American Indian		
or Alaska Native, Native Hawaiian or Other Pacific Islander, Other	89	103
Subtotal:	800*	919

<sup>\*</sup> Approximate sample size at outset of study

Fielding took place from December 26-30, 2017. SSI online participants were directed to a link through Qualtrics, programmed by ECPIP. ECPIP monitored data collection processes to ensure that the demographic breakdown of completed surveys reflected statewide population parameters. A total of 774 responses were collected. It is important to note that online samples of the type utilized in this study are non-probability samples, and thus, weighting, sampling error, and traditional response rate calculations cannot be applied. While every effort was made to utilize a sample that closely approximate the distribution of key demographic characteristics within the state of New Jersey, readers are advised to exercise caution when drawing conclusions based on the findings reported here.

#### **Summary of Key Findings**

The distribution of responses given to each question included in the survey are shown in Appendix B. In general, whereas about half of all respondents indicated being concerned about prescription pain medication as a potential cause of injury or death in their family, a greater percentage of respondents (between 60-70%) expressed concerns about potential injury or death due to gun violence, infectious diseases, and traffic accidents. Asked to rate the severity of different potential causes of death in the state, about an equal percentage of respondents (30%) perceive motor vehicle crashes to be as deadly as heroin or prescription drug overdose. According to the fatal accident statistics compiled by the New Jersey State Police, there 635 traffic-related fatalities in 2017. According to the National Center for Health Statistics, there were 485 firearm-related deaths in New Jersey in 2016. By comparison, according to CDC's data deaths from drug overdoses in New Jersey topped 2,056 in 2016, killing more people than guns, car accidents and suicides combined. Thus, it appears that New Jersey residents underestimate the death toll of opioid and heroin addiction.

When asked, a third of all survey respondents indicated being prescribed pain medication in the past three years. A majority of these individuals (about 60%) were prescribed pain medicine due to new non-work related injury, surgery, or out-patient procedure. Of those who were prescribed pain medicine, the great majority (about 70%) filled the prescription and took the medication, yet only about half recalled having concerns about taking the medication they were prescribed. Of those, about 25% were concerned about addiction but a greater percentage (about 50%) were mostly concerned about side effects, including grogginess and upset stomach. Thus, there is still significant room for improving public understanding of the risks of addiction associated with prescription pain medicine.

In addition, the fact that only about 20-30% of all respondents expressed great concern about becoming addicted once they start using pain medicine, may be due to optimistic bias (i.e., the belief that one is not personally susceptible to addiction). Such optimistic bias is likely associated with apparent misperceptions about which individuals are most likely to become addicted to opioid painkillers — whereas a majority of survey respondents (62%) correctly indicated that anyone can get addicted to opioids, there was still sizable groups of respondents (45-58%) who believe that individuals with addictive personality, those with a family history of drug addiction, and individuals with mental illness are the most likely to develop addiction. Thus, it seems imperative to correct such misperceptions for a greater number of individuals to form accurate and realistic assessment of their risk of becoming addicted to opioids.

The survey also included a number of questions that examined respondents' familiarity with Naloxone, an antidote that can be used in the event of an opioid overdose. Most respondents (over 80%) heard about Naloxone, but most (over 50%) do not know much about it or how to use it. In addition, only about 10-25% of respondents are confident that they can detect symptoms of addiction, know how to get help if they or a love one is in need of treatment, or knowing how to choose among different treatment options. Overall, then, there is an urgent need in further educating members of the public about treatment of opioid addiction and overdose.

Lastly, whereas a majority of respondents (about two-thirds) do not personally know someone who was addicted or died of opioid addiction, and even fewer (10%) know someone who was a victim of heroin addiction, most (over 60%) are using or know someone who is using opioid painkillers they were prescribed legitimately. The pattern of responses to these questions underscores the importance of increasing public awareness regarding the link between use of opioids and heroin addiction.

Based on these findings, and given the potential limitations of the study as discussed above, it is possible to offer the following recommendations:

- From a risk communication point of view, it may be beneficial to create messages that compare the rate of deaths from opioid addiction to that of traffic and gun-related fatalities in the state (since people seem to overestimate these).
- The majority of respondents that were prescribed pain killers, took them. It may be useful to
  emphasize in future messaging that medicine should be used to treat actual pain, not to prevent
  potential pain.
- The data suggest there is still need to educate members of the public about the risk of addiction it may helpful to provide illustrative information or testimonials about how easy it is to get addicted.
- There are many misperceptions (including stigma) regarding individuals who are most likely to get addicted. Correcting such misperceptions is likely to influence how people judge their own risk of addiction and, therefore, their motivation to take precautionary actions.
- There is a significant gap in public knowledge about how and where to get help for treating addiction or what treatment options are available to them. Providing information or creating tools (e.g., online registry of treatment facilities) that people can use to this end seems a logical next step for public outreach efforts.

#### **Principal Investigator**

Itzhak Yanovitzky (PhD, University of Pennsylvania), is an Associate Professor at Rutgers University's School of Communication and Information with a secondary appointment at the School of Public Health. He is an expert in the areas of behavior change communication, public policy, translational research, and program evaluation. Dr. Yanovitzky has extensive experience working across disciplines as well as with individuals and communities to build capacity around health and wellness issues, including most recently community organizing efforts to address the opioid and heroin epidemic.



### Appendix A Survey Questionnaire

Thank you for participating in this study. Select YES below to give your consent for us to use your responses and to start the survey. If you do not wish to participate, please select NO. CLICK NEXT when you have selected your answer.

Remember, <u>your answers are confidential</u> and will only be reported in combination with others. Confidential means that the research records will include some information about you, and this information will be stored in such a manner that some linkage between your identity and the response in the research exists. All data will be securely stored and password-protected with access limited to members of the research team listed below.

<u>Your participation is voluntary</u>, you may end at any time, and you may skip questions you do not want to answer without any penalty to you. There are no foreseeable risks to participation in this study.

If you have any questions about the study or study procedures, you may contact Eagleton Center for Public Interest Polling (ECPIP) Director Dr. Ashley Koning at 848.932.8995 or eagleton.poll@rutgers.edu. You may also contact Dr. Itzhak Yanovitzky at 848.932.8852 or itzhak@comminfo.rutgers.edu.

If you have any questions about your rights as a research subject, please contact an IRB Administrator at the Rutgers University, Arts and Sciences IRB: Institutional Review Board at Rutgers University, the State University of New Jersey/ Liberty Plaza, Suite 3200 / 335 George Street, 3rd Floor / New Brunswick, NJ 08901 / 732.235.2866 / humansubjects@orsp.rutgers.edu.

O YES (1)		
O NO (2)		
End of Block: CONSENT		
Start of Block: SCREENER		

AGE

To ensure we are reaching people of all ages, would you please tell us your age?

\_\_\_\_\_

Skip To: End of Block If AGE < 18
Page Break
ZIP What is the zip code of your primary place of residence?
COUNTY What county do you live in?
▼ Atlantic County (1) Do NOT live in New Jersey (22)
GENDER How do you describe yourself?
O Male (1)
O Female (2)
O Transgender (3)
O Do not identify as Male, Female, or Transgender (4)
HISP Are you of Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban, Brazilian, Dominican, or some other Spanish or Portuguese-speaking background?  O Yes (1)
O No (2)

Page Break
Display This Question:
If HISP = No
RACE Do you consider yourself ?
Do you consider yoursen!
Check all that apply.
White (1)
Black or African American (2)
Asian (3)
American Indian or Alaskan Native (4)
Something else (5)
Page Break —
Display This Question:
If HISP = Yes

#### **HISPRACE**

Many people of Latino or Hispanic origin also consider themselves to be part of a racial category. How about you? Do you consider yourself  $\dots$ ?

Check all that apply.	
White (1)	
Black or African American (2)	
Asian (3)	
American Indian or Alaskan Native (4)	
Something else (5)	
End of Block: SCREENER	
Start of Block: Survey	

**Q1**How concerned are you about each of the following as a potential cause of injury or death to you or a family member?

Very concerned (1)	Somewhat concerned (2)	Not very concerned (3)	Not concerned at all (4)
0	0	0	0
0	0	$\circ$	$\circ$
0	0	$\circ$	0
0	0	0	0
0	0	0	0
0	0	0	0
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#### Q2

To the best of your ability, please rank the following in terms of how many deaths it causes in New Jersey, with 1 meaning it causes "the most deaths" and 5 meaning it causes "the least deaths" among the causes listed here:

Accidental digestion of non-medical poisons (3)	
Heroin overdose (1)	
Injuries in the workplace (4)	
Motor vehicle crashes (5)	
Opioid prescription drug overdose (2)	

(Click and drag each item to reflect your preferred order.)

Page Break				
Q3A  For the purposes of this survey, an opioid painkiller is a narcotic pain medication that is typically prescribed when pain is severe. Most are taken by mouth in pill form, but some are absorbed through the skin using a patch or provided intravenously. Some types of opioid drugs include Codeine (only available in generic form), Hydrocodone (Lorcet, Lortab, Norco, Vicodin), Meperidine (Demerol), Methadone (Dolophine, Methadose), and Oxycodone (OxyContin, Oxyfast, Percocet, Roxicodone).				
Q3B In the past three years, have you or have you not been prescribed an opioid painkiller?				
O Yes, I have (1)				
O No, I have not (2)				
Skip To: End of Block If Q3B = No, I have not				
Page Break				
Q4 What was the main reason you were prescribed an opioid painkiller?				
O New work-related injury/surgery/out-patient procedure (1)				
O New non-work related injury/surgery /out-patient procedure (2)				
O Chronic pain from older work-related injury/surgery (3)				
O Chronic pain from older non-work related injury/surgery (4)				
O Chronic pain from disease (i.e. arthritis) (5)				
Other (please specify): (6)				

Q5 Which of the following best describes your usage of opioid painkillers in the past three years?
O It was prescribed to me, but I did not fill the prescription. (1)
O I filled the prescription, but I did not take the medication. (2)
O I filled the prescription, and I took the medication. (3)
O It was not prescribed to me, but I took the medication without a prescription. (4)
O It was not prescribed to me, and I did not take this type of medication. (5)
Q6 When you were prescribed an opioid painkiller, did you or did you not have any concerns and/or initial hesitations?
O Yes, I did (1)
O No, I did not (2)
O Don't know/can't remember (3)
Skip To: Q8 If Q6 = No, I did not
Skip To: Q9 If Q6 = Don't know/can't remember
Page Break

**Q8**How concerned are you about the following if and/or when you or a loved one starts to take a prescription opioid painkiller?

	Extremely concerned (1)	Somewhat concerned (2)	Not very concerned (3)	Not at all concerned (4)
Death due to accidental misuse or complications (1)	0	0	0	0
Unintentional addiction (2)	0	0	0	0
Permanent changes to your brain chemistry (3)	0	0	0	0

[x]

#### Q9

Which of the following types of people do you believe are at risk of becoming addicted to opioid painkillers?

Please select all that apply.
Those with addictive personalities (1)
Those who cannot properly take care of themselves (2)
Those who have a family history of addiction (3)
Those with mental health issues (4)
OAnyone (5)
No one (6)
Some other type of person (please specify:) (7)
Don't know (8)
Q10 Which of the following statements best represents your familiarity with NARCAN or Naloxone, an antidote that can be used in the event of an opioid overdose?
O I have used it to prevent or attempt to reverse an opioid overdose (1)
O I am aware of it and confident I could use it (2)
O I am aware of it but not sure how to use it (3)
O I heard of it but don't know much about it (4)
O I have never heard of it (5)

Q11 How confident are you that?	Very confident (1)	Somewhat confident (2)	Not very confident (3)	Not at all confident (4)
You could spot the signs a drug overdose (1)	0	0	0	0
You could spot the signs of misuse or abuse of opioid painkillers (2)	0	0	0	0
You could appropriately use or administer NARCAN (an opioid overdose antidote) in the event of an overdose (3)	0	0	0	0
You know where to go if you or a someone close to you needed treatment for opioid misuse (4)	0	0	0	0
You know which types of substance-use treatments or medications work best for opioid misuse (5)		0	0	0
You know how to obtain NARCAN (an opioid overdose antidote) (6)	0	0	0	0

Page Break

You know how to perform first aid if someone if experiencing are overdose (7)	t s		0	0	0
End of Block: S	urvey				
Start of Block:	Survey (Opioi	d)			
Q12A In the past three y		or someone you k	now ?		
Please check all th	mat apply.  Myself (1)	Family/Loved One (2)	Co-worker or their family (3)	Neighbor or their family (4)	No one (5)
Started to use opioid painkillers (1)					
Become addicted to opioid painkillers (2)					
Survived an opioid painkiller overdose (3)					
Died of an opioid painkiller overdose (4)					

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Display This Question:

If Q12A = Myself

Or Q12A = Family/Loved One

Or Q12A = Co-worker or their family

Or Q12A = Neighbor or their family

Q13A

To the best of your knowledge, did any instances of opioid usage in the past three years by you or someone you know begin with ...?

Please check all that apply.

Legitimate prescription opioid painkiller usage (1)

Ullegal or recreational drug usage (2)

Other (Please specify): (3)

Don't know/not sure (4)

End of Block: Survey (Opioid)
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Q12B

In the past three years, have you or someone you know ...?

Start of Block: Survey (Heroin)

Page Break

	Myself (1)	Family/Loved One (2)	Co-worker or their family (3)	Neighbor or their family (4)	No one (5)
Started to use heroin (1)					
Become addicted to heroin (2)					
Survived an heroin overdose (3)					
Died of an heroin overdose (4)					

```
Display This Question:

If Q12B = Myself

Or Q12B = Family/Loved One

Or Q12B = Co-worker or their family

Or Q12B = Neighbor or their family

Q13B

To the best of your knowledge, did any instances of heroin usage in the past three years by you or someone you know begin with ...?

Please check all that apply.
```

Legitimate prescription opioid painkiller usage (1)

Illegal or recreational drug usage (2)

Other (Please specify): (3)

Don't know/not sure (4)

End of Block: Survey (Heroin)



## Appendix B PDFNJ Study Supplement's Survey Questions and Responses (N = 774)

How concerned are you about each of the following as a potential cause of injury or death to you or a family member?

	Very concerned	Somewhat concerned	Not very concerned	Not concerned at all
Prescription pain medication	17.2%	29.1%	30.2%	22.6%
Driving	27.4%	44.5%	21.4%	5.6%
Commercial airline travel	14.1%	25.6%	39.4%	19.9%
Severe weather or natural disaster	17.7%	38.9%	31.9%	11.5%
Infectious disease	22.6%	37.2%	27.6%	11.1%
Gun violence	33.4%	31%	24.1%	10.5%

To the best of your ability, please rank the following in terms of how many deaths it causes in New Jersey, with 1 meaning it causes "the most deaths" and 5 meaning it causes "the least deaths" among the causes listed here:

	1 (most)	2	3	4	5 (least)
Accidental digestion of non-medical poisons	3%	7.2%	15.4%	38.6%	37.9%
Heroin overdose	29%	37.6%	18.4%	10.2%	4.9%
Injuries in the workplace	1.9%	7.9%	11%	30.8%	48.2%
Motor vehicle crashes	31.4%	13.2%	35.2%	15.5%	4.7%
Opioid prescription drug overdose	34.6%	34.1%	20.1%	6.9%	4.3%

For the purposes of this survey, an opioid painkiller is a narcotic pain medication that is typically prescribed when pain is severe. Most are taken by mouth in pill form, but some are absorbed through the skin using a patch or provided intravenously. Some types of opioid drugs include Codeine (only available in generic form), Hydrocodone (Lorcet, Lortab, Norco, Vicodin), Meperidine (Demerol), Methadone (Dolophine, Methadose), and Oxycodone (OxyContin, Oxyfast, Percocet, Roxicodone).

In the past three years, have you or have you not been prescribed an opioid painkiller?

- Yes, I have (33%)
- No, I have not (67%)

What was the main reason you were prescribed an opioid painkiller? [NOTE: asked only of those who were prescribed pain medication, n = 258]

Reason	
New work-related injury/surgery/out-patient procedure	12%
New non-work related injury/surgery /out-patient procedure	57%
Chronic pain from older work-related injury/surgery	7.8%
Chronic pain from older non-work related injury/surgery	13.6%
Chronic pain from disease (i.e. arthritis)	8.5%

Which of the following best describes your usage of opioid painkillers in the past three years? [NOTE: asked only of those who were prescribed pain medication, n = 258]

It was prescribed to me, but I did not fill the prescription	12%
I filled the prescription, but I did not take the medication	16.3%
I filled the prescription, and I took the medication	68.6%
It was not prescribed to me, but I took the medication without a prescription	1.2%
It was not prescribed to me, and I did not take this type of medication	1.2%

When you were prescribed an opioid painkiller, did you or did you not have any concerns and/or initial hesitations? [NOTE: asked only of those who were prescribed pain medication, n = 258]

- Yes, I did (48%)
- No, I did not (48%)
- Don't know/can't remember (4%)

Which of the following reasons were you most concerned about before taking the prescription? Please select all that apply. [NOTE: asked only of those who were prescribed pain medication, n = 258]

- Addiction (25.6%)
- Upset stomach (14%)
- It would not work (4%)
- Grogginess/unable to function (18%)
- Side effects, in general (26.7%)
- Interaction with other medications (13.6%)
- Misuse (such as taking too much, mixing with other prescriptions or alcohol, etc.) (10.5%)

How concerned are you about the following if and/or when you or a loved one starts to take a prescription opioid painkiller?

	Extremely concerned	Somewhat concerned		Not at all concerned
Death due to accidental misuse or complications	20.2%	20.5%	26.4%	28.7%
Unintentional addiction	30.6%	12.4%	22.1%	30.6%
Permanent changes to your brain chemistry	21.7%	14.3%	26.4%	33.3%

Which of the following types of people do you believe are at risk of becoming addicted to opioid painkillers? Please select all that apply.

- Those with addictive personalities (58%)
- Those who cannot properly take care of themselves (41%)
- Those who have a family history of addiction (54%)
- Those with mental health issues (45%)
- Anyone (62%)
- No one (3.5%)
- Don't know (1.6%)

Which of the following statements best represents your familiarity with NARCAN or Naloxone, an antidote that can be used in the event of an opioid overdose?

- I have used it to prevent or attempt to reverse an opioid overdose (4%)
- I am aware of it and confident I could use it (20%)
- I am aware of it but not sure how to use it (33%)
- I heard of it but don't know much about it (26%)
- I have never heard of it (16%)

#### How confident are you that ...?

	Very confident	Somewhat confident	Not very confident	Not at all confident
You could spot the signs a drug overdose	20%	42%	26.5%	12%
You could spot the signs of misuse or abuse of opioid painkillers	21%	38%	29%	12%
You could appropriately use or administer NARCAN (an opioid overdose antidote) in the event of an overdose	14%	25%	34%	27%
You know where to go if you or a someone close to you needed treatment for opioid misuse	27%	39%	23%	10%
You know which types of substance- use treatments or medications work best for opioid misuse	11%	27%	34.5%	28%
You know how to obtain NARCAN (an opioid overdose antidote)	11.5%	20.5%	29%	39%
You know how to perform first aid if someone is experiencing an overdose	15%	25%	37%	23%

In the past three years, have you or someone you know ...? Please check all that apply.

	Myself	Family/ Loved one	Co- worker or their family	Neighbor or their family	No one
Started to use opioid painkillers	34.9%	28.7%	8.5%	10%	36%
Become addicted to opioid painkillers	4%	15%	6.5%	11.5%	67%
Survived an opioid painkiller overdose	2%	11%	3%	6%	76%
Died of an opioid painkiller overdose	-	8%	5%	9%	78%

To the best of your knowledge, did any instances of opioid usage in the past three years by you or someone you know begin with ...?

Please check all that apply.

- Legitimate prescription opioid painkiller usage (47%)
- Illegal or recreational drug usage (15%)
- Don't know/not sure (11%)

In the past three years, have you or someone you know ...? Please check all that apply.

	Myself	Family/ Loved One	Co- worker or their family	Neighbor or their family	No one
Started to use heroin (1)	4%	15%	6%	10%	70.5%
Become addicted to heroin (2)	2%	17%	4%	9%	70%
Survived an heroin overdose (3)	1.5%	10%	5.5%	5%	78%
Died of an heroin overdose (4)	-	10%	7%	10%	71%

To the best of your knowledge, did any instances of heroin usage in the past three years by you or someone you know begin with ...?

Please check all that apply.

- Legitimate prescription opioid painkiller usage (20%)
- Illegal or recreational drug usage (17%)
- Don't know/not sure (7%)